

Diquark pseudo-Nambu-Goldstone bosons in color superconducting quark matter

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Abstract

The properties of the pseudo-Nambu-Goldstone bosons in the color superconducting phase of dense QCD with two light flavors are studied in the framework of the Bethe-Salpeter equation. The decay constants and the velocities are derived in the Pagels-Stokar approximation. The consistency of the approach with the Ward identities is discussed. These results impact thermodynamical properties of neutron stars, in particular, the cooling rate.
